## <u>REMARKS</u>

Claims 1-35 remain pending in this application.

The Examiner rejected claims 1-4, 11-14, 21-24, and 35, under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,410,162 (*Tigelaar*) in view of U.S. Patent No. 5,719,796 (*Chen*). Applicants respectfully traverse this rejection.

The Examiner admits that *Tigelaar* does not disclose a correlation model. The Examiner cites *Chen* to read upon the correlation model, citing col. 11, lines 7-18. However, Applicants respectfully assert that *Chen* discloses a process model but does not disclose a correlation model. *Chen* merely refers to fitting data populations for a range of parameter and data measurements, where the fitting function is calculated by a direct percentile correlation. The Examiner uses this term ('correlation"), which is merely referring to percentile correlation for calculating a fitting function to make obvious the correlation model of claim 1. This clearly does not make obvious the correlation model of claim 1. In other words, the mere reference to the term "correlation" in the context of a fitting function in *Chen* does not make obvious the correlation model that models a characteristic parameter measured, as called for by claim 1 of the present invention. Therefore, *Chen* does not make up for the deficit of *Tigelaar*.

Tigelaar is directed towards measuring characteristics to study the temperature dependent phenomena, which actually directs those skilled in the art away from various claims of the present invention. As an example, as called for by dependent claims 2-10, the present invention also calls for performing wafer electrical tests after the rapid thermal process has been

completed. In contrast, *Tigelaar* is actually directed towards performing wafer tests <u>during</u> the rapid thermal process to examine the temperature dependent phenomena. Therefore, *Tigelaar* actually directs one away from several claims of the present invention. Therefore, one of ordinary skill in the art would not be motivated to combine *Tigelaar* with *Chen* to make obvious all of the elements of claim 1 of the present invention.

In fact, *Tigelaar* does not disclose modeling any features, unlike the subject matter of claims of the present invention. Furthermore, *Tigelaar* does not correlate a correlation model to correlate any factors. Although *Chen* mentions some process models, it does not make up for the deficit of *Tigelaar*, particularly since *Chen* does not disclose a correlation model. Therefore, arguendo, even if *Tigelaar* and *Chen* were to be combined, all of the elements of claim 1 would not be disclosed or made obvious. Therefore, claim 1 of the present invention is allowable. Additionally, independent claims 11 and 21 call for various apparatuses and methods that call for using a correlation model to model a characteristic parameter and applying the correlation model to modify a processing, are also allowable for at least the reasons cited above.

Independent claims 1, 11, and 21 are allowable for at least the reasons cited above. Additionally, dependent claims 2-4, 11-14, and 22-24, which depend from independent claims 1, 11, and 21 respectively, are also allowable for at least the reasons cited above.

Reconsideration of the present application is respectfully requested.

Applicants acknowledge that the Examiner allowed claims 31-34. Applicants also acknowledge that the Examiner had indicated claims 5-10, 15-20, and 25-30 contain allowable

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subject matter. In light of the arguments presented above, Applicants respectfully assert that all of the claims 1-35 are allowable. In light of the arguments presented above, a Notice of Allowance is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Houston, Texas telephone number (713) 934-4069 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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